

CHAPTER 5

Illustrative Examples

5-1 New Facility Design

a. DOD Manual 4270.1 -M establishes specific space allowances for certain types of facilities. Design premises are based on an Arts and Crafts Center of 20,650 gross square feet, exclusive of mechanical equipment space. This is the maximum space allowance for a military population of 20,000 to 25,000. The area within the Arts and Crafts Centers basically conforms to the following space distribution:

Activity	Percent of Total Areas
General Arts and Crafts	40%
Photography	10%
Woodwork and Repair	35%
Support Activities	15%

b. It should be recognized that the percentage of total area allocation listed for the activities above may vary as the gross building area changes. For instance, in the larger Arts and Crafts Centers more space might be devoted to new or expanded programs in general arts and crafts than to a proportional increase in the size of the woodwork shop. Nevertheless, the percentages given are a solid base for providing adequate facilities for a diversified program.

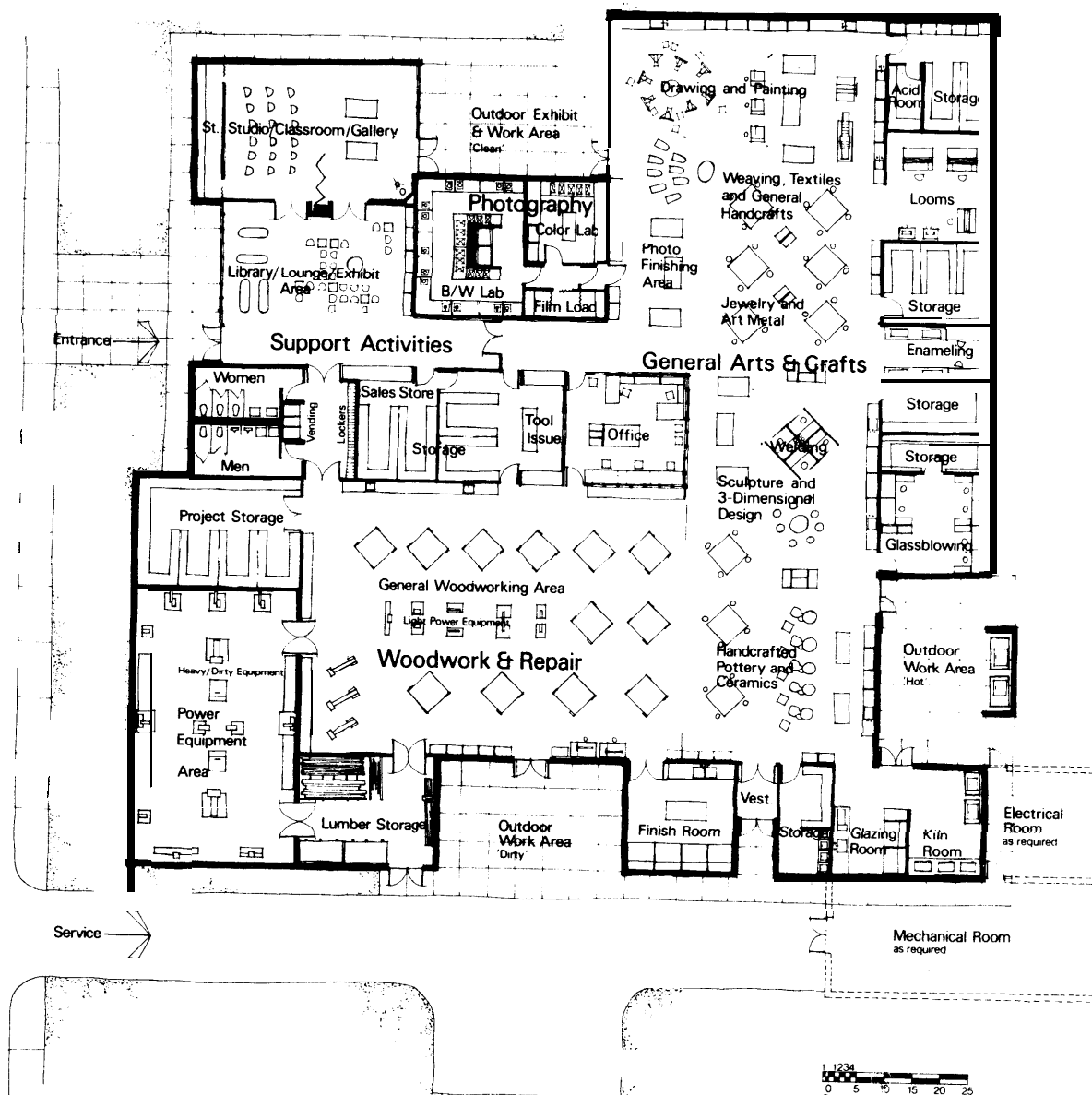
c. There are two example space allocation summaries at the end of Chapter 3. Example A follows the conventional pattern of separating the building into four self-contained areas for general arts and crafts, photography, woodwork and repair, and support facilities. Example B follows the concept of shared space and separates only incompatible or specialized activities into committed areas. The identification of specific areas is much less detailed because of use of larger uncommitted spaces to accommodate many activities.

d. A design solution based on the shared space concept follows. The shared space concept was chosen to be developed as the example solution because it offers the greatest degree of flexibility and is generally the approach advocated by this guide.

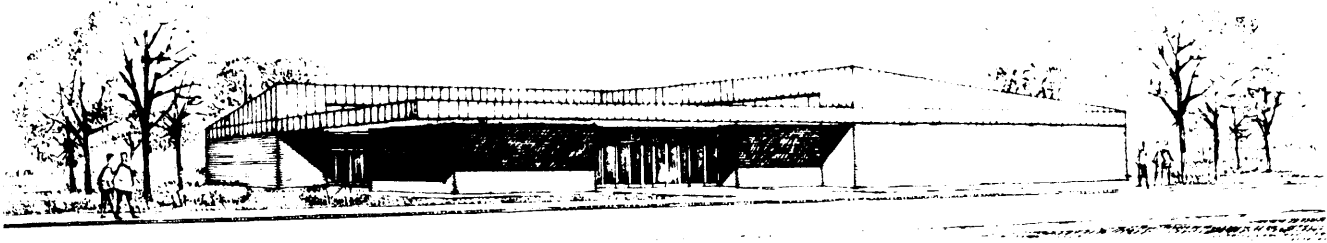
Design Solution

view a

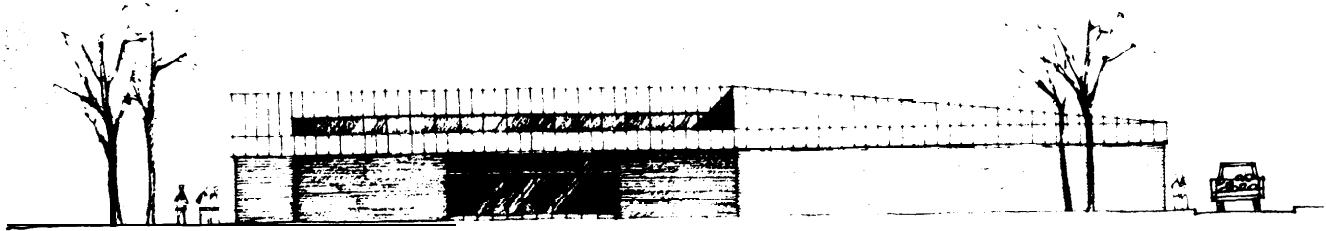
elevation b



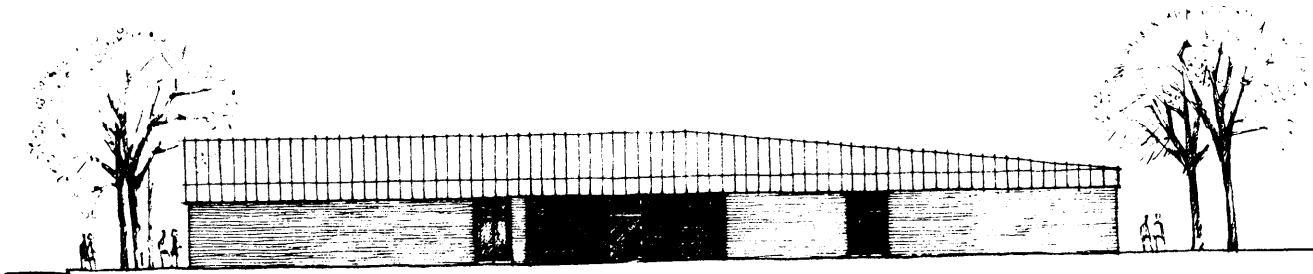
elevation c



view a



elevation b



elevation c

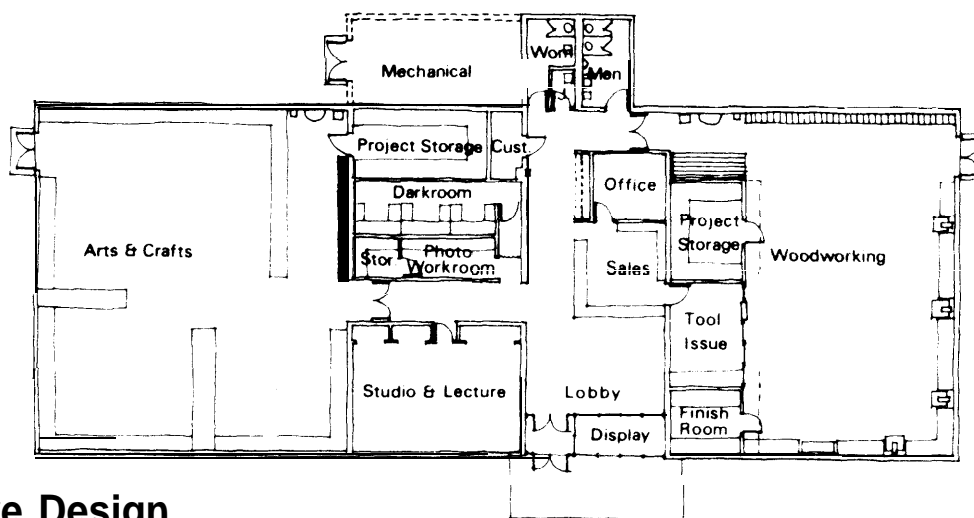
5-2 Modification and Expansion of Existing Facilities

Existing arts and crafts facilities vary considerably in their adequacy for housing the range of activities required locally. Some programs operate in buildings designed and constructed specifically as Arts and Crafts Centers. Others utilize found spaces of various types. However, regardless of the type or age of the facilities, it should be expected that space layouts will periodically need modifications as programs change.

b. The following illustrations are presented to demonstrate the planning options that might be used in modifying and/or expanding existing arts and crafts facilities. The illustrations emphasize a greater use of shared spaces, as has been advocated in this Design Guide.

c. The floor plan shown below is the Arts and Crafts Shop prepared as Definitive Design No. 31-21-11, dated 12 June 1967. The size of this facility is 9400 square feet, and it has been the prototype for installations with military strengths between 7,001 and 10,000 personnel.

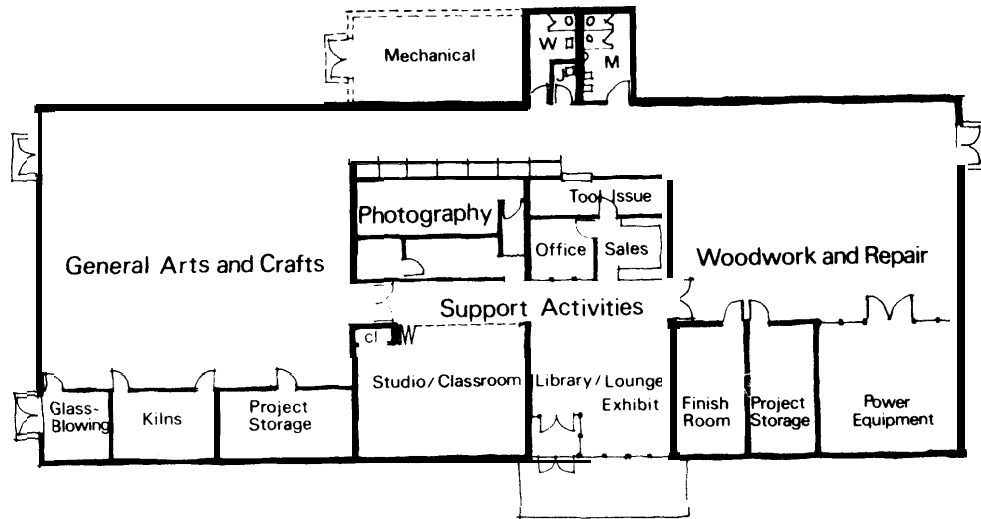
d. The concepts for modifying and expanding this design have been developed without emphasis being placed on any particular structural system that might have been incorporated in an actual building. The Definitive Design could be interpreted in a variety of systems ranging from long span steel joist framing to bearing walls with short span concrete roof planks. The assumption has been made, however, that the building would have some committed space which, under most reasonable circumstances, would be uneconomical to alter. These spaces are the photo lab and toilet rooms which contain the majority of the plumbing elements in the building, and the mechanical equipment room where included in the actual facility.



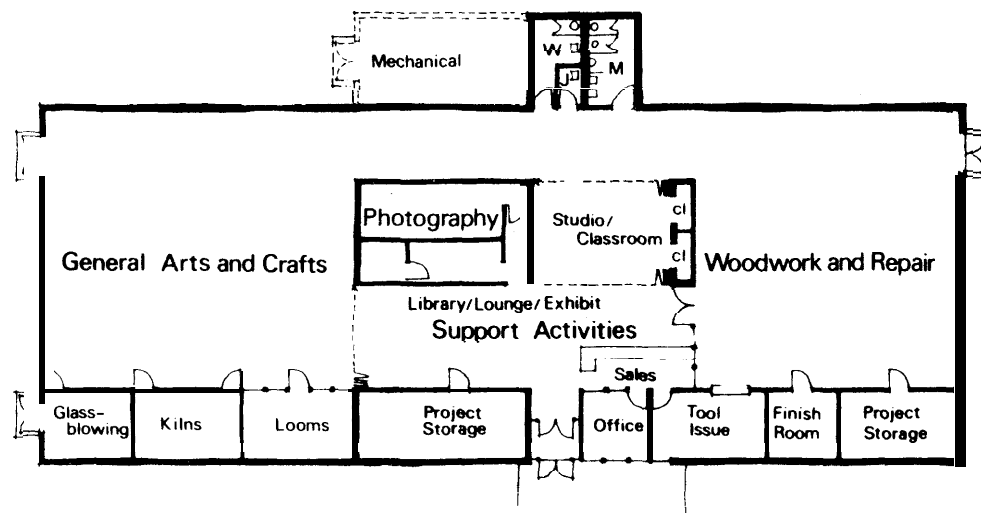
Existing Definitive Design

e. Example A is the simplest of the conversions illustrated. The solution provides a direct link between the arts and crafts and woodworking areas, and encloses the minimum number of activities requiring isolation. The studio/classroom/gallery may be opened up by means of a folding partition to increase flexibility for a wide variety of programs and activities, especially those relating to photography, exhibits, demonstrations, and those crafts not requiring special equipment.

f. In Example B, a more drastic approach was taken. The intent was to open up as much of the interior space as possible for general project work. Thus the studio/classroom/gallery was moved into the center of the building and can be part of the shared multi-use work space or can be divided off by folding partitions.

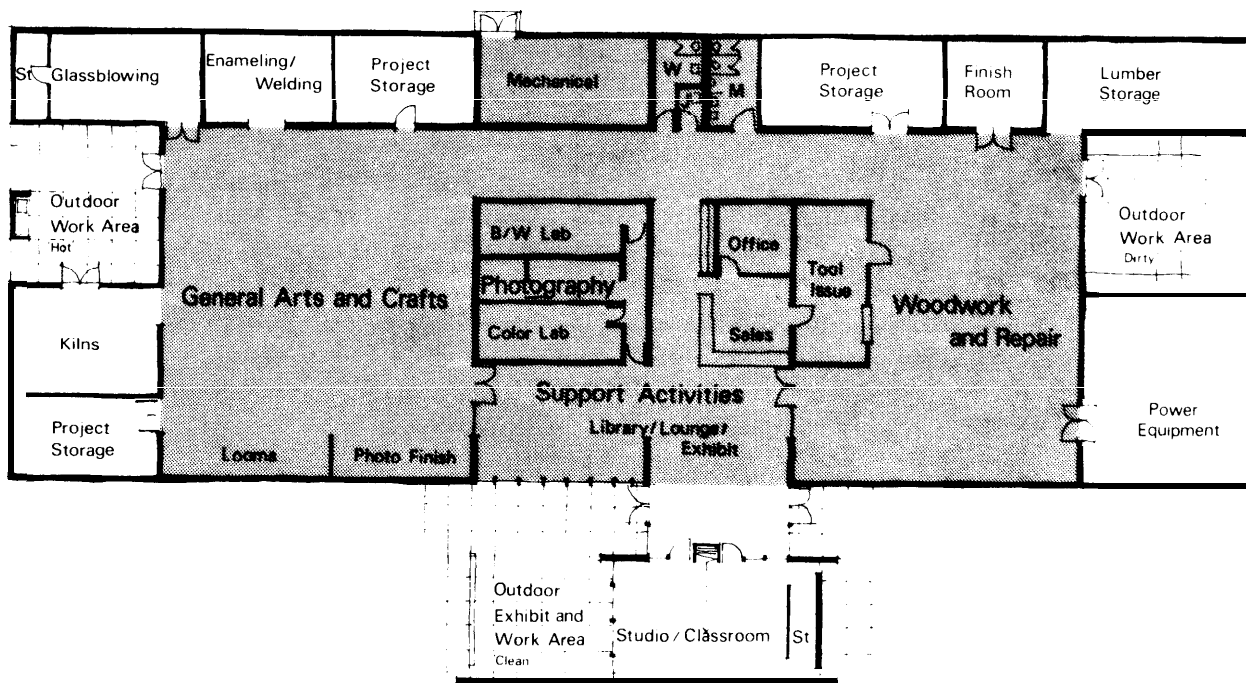


Example A



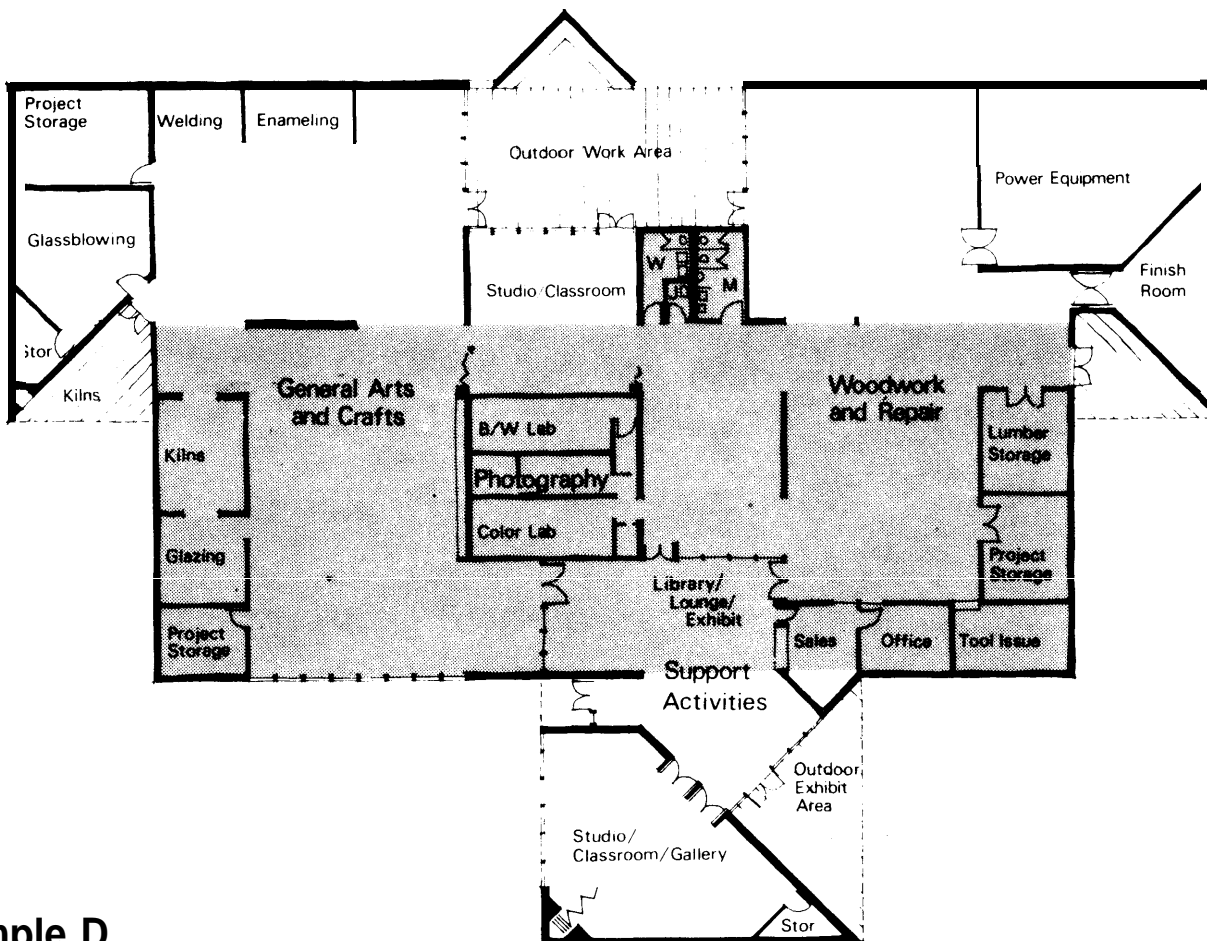
Example B

g. In Example C, the major activity areas have been expanded horizontally to create outdoor work areas at either end of the building. The rectilinear character of the main structure is maintained and specialized activities are concentrated around the perimeter. The photography area was expanded by adding an additional laboratory and flexibility is gained by relocating the studio/classroom/gallery to a new building element to the front of the basic building.



Example C

h. Example D suggests the possibility of expansion to the rear of the building with the use of a large shared outdoor work area. For illustrative purposes, it has been assumed in this instance that no central mechanical space was required.



Example D

